

The Chicago Crosstown Expressway

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CHICAGO'S method for expressway planning is unique in that we are the first public works planning body in the United States to mobilize and coordinate various professional disciplines systematically in order to arrive at recommendations for an alignment location and a highway design. In addition, for the Crosstown Expressway, members of Federal, state, county, and city governments have cooperated to form a single committee — the Crosstown Study Group — which includes representatives not ordinarily included in planning from the time of preliminary study through completion of an expressway. The Crosstown Study Group's interdisciplinary committee members include the following:

- U. S. Department of Transportation, Federal Highway Administration
- Illinois Division of Highways
- Cook County Highway Department
- The City of Chicago's
 - Department of Development and Planning
 - Department of Public Works
 - Department of Streets and Sanitation
 - Department of Urban Renewal
 - Department of Water and Sewers
- Mayor's Committee for Economic and Cultural Development
- Chicago Transit Authority
- Chicago Area Transportation Study

Northeastern Illinois Planning Commission Crosstown Associates, a joint venture of Skidmore, Owings and Merrill; C. F. Murphy Associates; Howard, Needles, Tammen and Bergendoff; and Westenhoff and Novick, Inc.

In addition, the following agencies contributed ideas and suggestions, as well as reviews, of several aspects of the Crosstown Expressway study:

Chicago Board of Junior College District #508
Chicago Board of Education
Chicago Park District
Chicago Housing Authority
Chicago Dwellings Association
U.S. Department of Housing and Urban Development
U.S. Department of Transportation, Federal Aviation Administration

Design Concept Team

A circumferential boulevard of monumental scale for Chicago was first envisioned in the broad concepts of the renowned Burnham Plan of 1909. One of its purposes was ". . . to divert from the center, traffic not having its objective point in the central area." Since then, a circumferential roadway has been an integral part of all the plans of Chicago.

At present, Chicago's transportation network contains a series of radial routes that converge slightly to the west of the central business district. The proposed highway, which in recent years has been termed the Crosstown Expressway, would run north and south at the western edge of the city, connecting the various arms of the existing network and easing the demand on these radial routes. The Chicago Area Transportation Study of 1962 recommended that the location of the Crosstown Expressway be fixed in the general region of Cicero Avenue, and in 1964 this routing was incorporated into the basic policies statement of the official Comprehensive Plan of Chicago.

A more definitive analysis of the needs and character of the Crosstown Expressway was completed in 1966, when a transportation advisory group composed of representatives of the State of Illinois, County of Cook, and the City of Chicago, prepared a pioneering study of various locations and designs for the expressway, giving special emphasis to nontraffic considerations and exploring new possibilities for improving relocation and land planning associated with its concepts. This interagency team demonstrated the desirability of comprehensive planning for highways.

The general location for the Crosstown Expressway was selected through study of traffic congestion on arterial streets in the area, daily trip computation to determine the traffic-attracting power of the Loop, and a survey of existing roadway facilities. Once the need for a corridor across town was established, Creighton's Theory for Optimum

Spacing of Expressways was applied to establish specific alternatives of corridor location. The Cicero Avenue corridor was clearly in the area of greatest street deficiency. The Cicero corridor was equidistant between the hub of the radial expressway routes and the Illinois Tollway bypass route in the western environs of the city. Because of its location, an expressway in this corridor could connect directly to the Edens Expressway in the vicinity of the existing Edens-Kennedy junction near the northwest boundary of Chicago. It would also provide a direct connection between O'Hare and Midway, the city's two principal airports. The Cicero corridor clearly emerged as the priority area for detailed alignment investigations.

At present, traffic volumes in the Cicero corridor are heavy, with about 30,000 vehicles a day on Cicero, 20,000 on Archer Avenue, and 16,000 on 55th, 47th and 63rd streets. In addition, local streets are forced to carry heavy employee and truck traffic related to the surrounding industries. This environmental conflict may in some measure be responsible for the incomplete development of residential areas, where scattered vacant lots are common.

Initial proposals for the Crosstown Expressway were announced during December 1965 and January 1966. At this time, an alignment along the belt railway was proposed. This alignment was to be constructed as an 8-lane facility elevated for much of its length on structures built on air rights. Proposals for the alignment served a useful purpose in establishing the general route and in clarifying the urban goals for a detailed alignment with regard to the environment through which it passes.

Though not the optimum solution, the alignment selected was a satisfactory proposal and one that reflected Chicago's concern for social and human values. At the time of this recommendation, the Bureau of Public Roads guidelines for joint development (first defined in "A Concept for the Joint Development of Freeways and Other Urban Facilities" by F. C. Turner, December 2, 1966) were not available to the Crosstown study team. Because of the serious concern of Chicago and other urban centers for the consequences of existing Bureau of Public Roads design and land acquisition policies, the Bureau issued its joint development proposals and recommended a restudy of the Crosstown Expressway. New studies were therefore essential to determine how joint development concepts could be specifically applied to the proposed alignment.

In October 1967, the Crosstown Design Team was formed as a professional consultant to the Crosstown Study Group on the design of the Crosstown Expressway and related joint development. Crosstown Design Team's staff was composed of civil engineers, structural engineers, traffic analysts, architects, landscape architects, urban designers, city planners, sociologists, urban geographers, economists, applied mathematicians, lawyers, and market analysts. This staff of experts has grown to over 100 persons since the team's initiation. On

August 16, 1968, all of the professional consultants working on this project were merged into "Crosstown Associates."

Because of the recent reactivation of Midway Airport, one of Chicago's two most important airports, it was determined that the priority section of the Crosstown Expressway should connect Midway Airport with the Stevenson Expressway to the north and the Dan Ryan Expressway to the east. Crosstown Design Team's work began with studies to select the best possible alignment, both in terms of engineering and of joint development potential, within this priority section of the Cicero Avenue corridor.

Procedures and Evaluation Criteria

Three viewpoints, or categories, constituted the framework of our study. Each of the three had its own set of objectives and criteria, and each was treated separately in analysis. While relative values or weights were given to the individual criteria in each of the three categories, with respect to one another, alignments were rated with respect to each category separately. Thus, if one alignment emerged as the best in all three categories, it obviously would be the best solution.

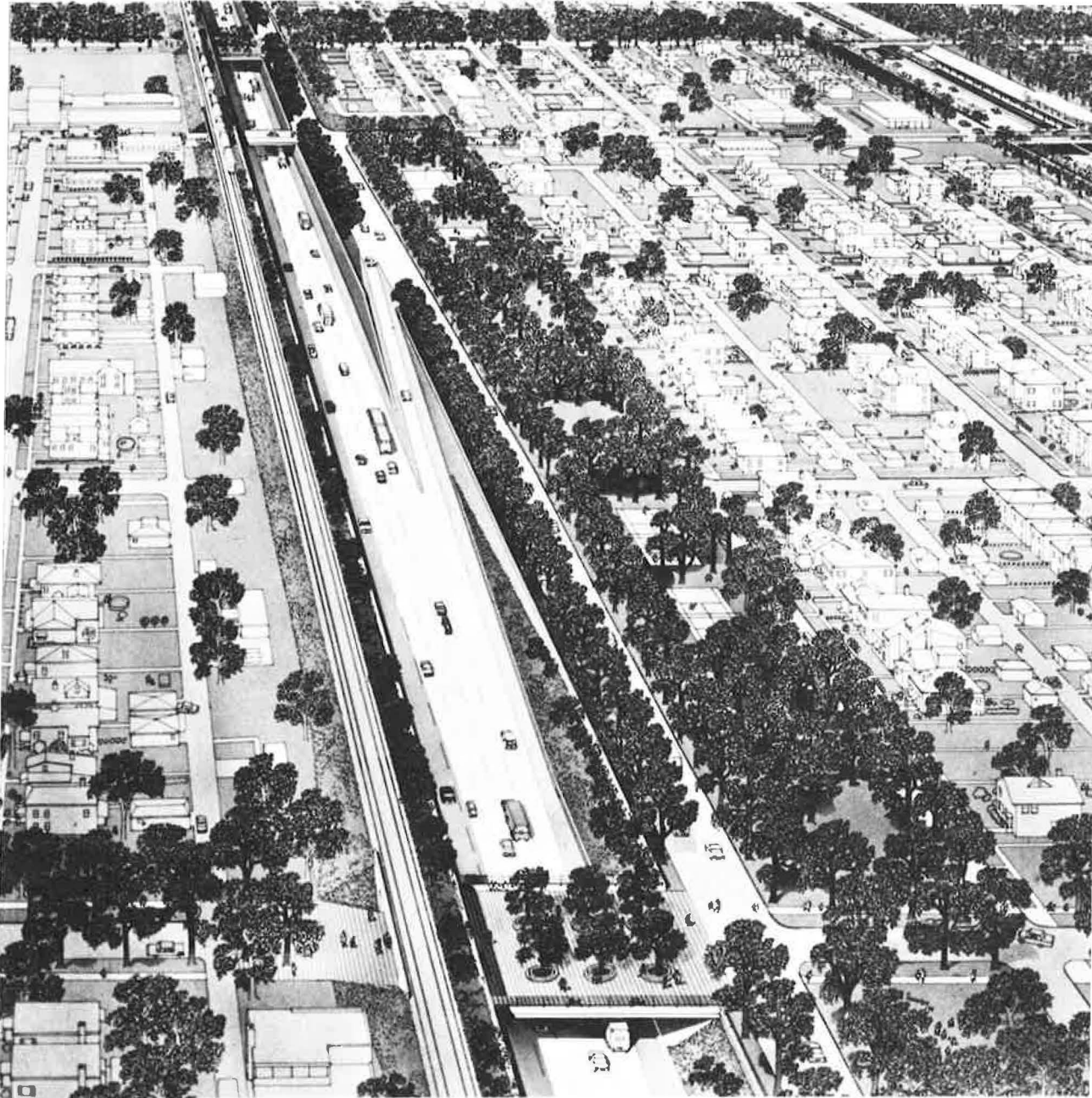
The category of engineering aspects included criteria for considering all technical and economic requirements of the expressway facility itself in its primary purpose of moving people and goods more safely, rapidly, and efficiently, and evaluating alternative alignments to other transportation facilities.

The category of community impact analyzed community groups on ethnic, religious, and political bases and considered the number of people and business establishments that would be directly dislocated by the alternative alignments.

The survey of demographic and population data investigated such aspects as the displacement of schools, churches, and parks; and the splitting of districts: school districts, fire districts, and police districts. For the purpose of community analysis, distinctions were made between the highly neighborhood-oriented grocery or drugstore and the more sector-oriented concerns such as the motel, or the used-car lot.

The population is composed primarily of families with an average of four persons per family. Most people own their own houses; about 20 percent rent homes or apartments. Monthly housing expenses average about \$130 for both owners and renters and the mean family income is just under \$10,000 per year. The area is almost exclusively white, except for the public housing area, which is almost entirely nonwhite.

The third category, potential land use improvements, explored opportunities presented by the alternative alignments as a possible catalyst for achieving desirable objectives—a means of linking the community as it is to an image of what it might ideally be. Chicago's basic policy requires that "transportation facilities should be used as



Proposed Chicago Crosstown Expressway from Stevenson Expressway to 67th Street. The depressed freeway is a split alignment located between the Belt Line railroad and Cicero Avenue. Design teams were created to consider engineering, economic and social impacts of several alternative routings.

positive factors in improving Chicago's communities and in establishing the future form of the city."

Having thus established a framework for the study, these three categories were then related to a process of analysis. Because the study group was to consider all alignment possibilities, the method of analysis had to function as a deductive process of elimination. Three sequential levels of analysis (general, intermediate, and detailed) were decided on as best able to accomplish this process of elimination.

At the general level of analysis, all proposed alignments in the Crosstown Study corridor (there were several dozen) were considered in the broadest context with respect to the city as a whole and the communities involved. Comparative evaluations of each alignment were made. Thus, each of the alternatives was given a rating with respect to the criteria for the engineering aspects category.

Concurrently, and in a similar manner, but entirely independently, each of the sociological, economic, and city planning factors were rated in their respective categories of impact on existing communities and potential land use improvements. Finally, findings were brought together and compared. If we were hoping for a decisive consensus in favor of a single alignment at the general level of analysis, we were disappointed. Six routes received acceptable ratings in all three categories. The pro's and con's of these six might be listed as follows:

Combined Alignment

PRO: Low industrial displacement.

CON: High residential displacement, prevents Midway Airport expansion.

Belt Line Alignment/Frontage Roads

PRO: Continuous frontage roads distribute traffic evenly and protect residential neighborhoods.

CON: Heavy industrial displacement, high residential displacement.

Belt Line Alignment

PRO: Minimum disruption of existing neighborhoods, least commercial displacement, lowest cost.

CON: High residential displacement, little opportunity for joint development projects, no frontage roads.

Belt Line-Cicero Alignment

PRO: Minimum disruption of existing neighborhoods.

CON: Highest residential displacement, little opportunity for joint development projects.

Divided Alignment/Exterior Access

PRO: Low residential displacement, great opportunity for short-range joint development projects, high protection of neighborhoods inside corridor, continuous frontage roads.

CON: Less protection of neighborhoods outside corridor, egress from Midway Airport requires use of preferential street interchange system.

Divided Alignment/Interior Access

PRO: Low residential displacement, great opportunity for both long and short range joint development projects, continuous frontage roads, highest accessibility.

CON: Highest commercial displacement.

In this manner, the study advanced into the second, or intermediate level of analysis. This level of analysis might be compared with the second power of magnification in a microscope. The field was narrowed to encompass only those alignments surviving the first screening, but these now were to be brought into sharper focus for more detailed analysis. New criteria were introduced in each area of investigation, and some of the criteria examined during the general level of analysis were given more detailed study. Finally, the three independent evaluations again were brought together.

Still there was no decisive result. Three alignments received acceptable ratings, and were selected from the six studied. These three seemed to offer the best possibilities for accomplishing our objectives. They were the Belt Line alignment, the Belt Line-Cicero alignment, and the Divided alignment with interior access.

The Belt Line alignment would connect at Stevenson Expressway and come south immediately adjacent to the belt railway. The Belt Line-Cicero alignment comes south along the belt railway to 55th Street, then bends to the west and, at 60th Street begins to follow along Cicero Avenue. The Divided alignment with interior access is divided into two one-way roadways. The roadway carrying traffic south starts at Stevenson Expressway and comes south right along the Belt railway. The northbound roadway replaces Cicero Avenue and carries traffic going north. At the conclusion of detailed analysis, the evaluation chart showed that all three of these alignments equally satisfied engineering requirements. In the impact on existing community and the potential land use categories, however, this last alignment emerged as the clear preference.

The Belt Line alignment was found to require displacement of some 160 families. In addition, it would allow for relatively minimum opportunity for neighborhood improvement. It would have the minimum cost of the three trial alignments, but only at the expense of minimum opportunities. The Belt Line-Cicero alignment could be integrated into the existing neighborhoods more successfully than the Belt Line alignment, but not as effectively as the divided alignment with interior access. In fact, it would displace some 208 families. The divided alignment with interior access became the recommended alignment.

Midway Stevenson Section: Plans and Innovations

From a casual first examination, the divided alignment with interior access might seem to be unorthodox, but in reality, the recommended solution operates as a simple system of one-way pairs, with the two elements separated by a quarter-mile of intervening space. A summary of its important characteristics is as follows:

1. A basic policy of the Chicago Comprehensive Plan is the provision of high accessibility corridors in the city. The recommended alignment recognizes this policy to the maximum extent.

2. The divided alignment provides for joint development of 48 acres of open space and 43 acres of developable space. It facilitates joint development by other agencies, both public and private.

3. Through joint development of remnant parcels taken for the expressway, neighborhoods will be improved by the addition of badly needed small parks and recreation areas. These will be located along the frontage roads, integrating the expressway with the neighborhoods.

4. With the frontage roads and the expressway performing as buffers, neighborhoods both external and internal to the corridor will be protected to the maximum extent. The system will reduce use of residential streets by trucking and other through traffic.

5. The recommended alignment results in the minimum displacement of families: 41 in single-family dwellings; 28 in multiple dwellings.

6. The recommended alignment offers the opportunity for relocation of families. Industrial and commercial establishments will have opportunities for relocation in areas near Midway Airport.

7. Elimination of strip commercial and consolidation of commercial activities into efficient centers is the goal of Chicago's Comprehensive Plan. The recommended alignment accomplishes this without displacing adjacent residential areas.

8. The divided alignment offers the highest quality of transportation service for both transient and local users. The frontage roads serve to assist in handling peak traffic loads. The split alignment will reduce gapers' block by at least 50 percent and eliminate the possibility of head-on collisions.

9. The recommended alignment provides a right-of-way for mass transit. Mass transit provision is located at the west side so that a bus stop or station can be located right at Midway Airport. Mass transit would be located next to the walled sections of the highway so that its noise will be shielded from the neighborhoods close by.

10. The divided alignment with interior access provides the best assurance that the large public investment in the crosstown expressway will benefit not only the users but also the neighborhoods in its corridor and the entire Chicago region. It reflects the search for new and imaginative solutions to highway planning desired by the public and all agencies of government.

The split alignment, with its reduced cross sections, results in minimum disruptive effect and maximum positive benefits to the neighborhoods. Air rights development becomes more feasible, both economically and practically. Pedestrian bridges are easily provided as safe means for children to walk to school and others to communicate between neighborhoods.

Consulting the Community

This, then is the contribution of the Chicago planning approach. If it is a unique contribution, it is because it introduces a systematic and objective method of analyzing and evaluating the many diverse factors of social, economic, psychological, fiscal, and political considerations — each area of study conducted independently of the others and each according to its own professional disciplines. It is a methodology that documents the thoroughness and objectivity of every step in reaching its conclusions.

We who share the direct responsibility for the decision-making processes are bound in good conscience to strive for a proper balance in achieving transportation goals that are in harmony with other community objectives. We are concerned about losses to small businesses, disruption of neighborhoods, and the relocation of displaced families. For these reasons, we have recommended the divided alignment with interior access. For these reasons, we have encouraged our recommendation to be seen by and explained to the people who live and work in the vicinity of the premier section of the Crosstown Expressway. For these reasons, we set out to achieve total community acceptance.

A community relations consultant was employed to assist us in planning and carrying out a series of presentations. A model of the Stevenson Expressway to Midway Airport area, which included the proposed Crosstown Expressway, was created. Graphic displays, slides, a basic give-away brochure and press kits were prepared.

On June 24, 1968, a series of public presentations was made in Mayor Daley's office to civic, business, and professional organizations. This presentation was thoroughly chronicled by the city-wide communications media.

A week later, an evening meeting to present the proposal locally was held at an elementary school in the Midway-Stevenson area. An overflow crowd of more than 700 people attended. So many others wanted to attend that a second meeting was immediately scheduled and held the next evening at which another large crowd turned out. Both of these community meetings continued until all questions had been exhausted.

Following these meetings, from July 3 through July 10, 1968, the model and other display material were put on exhibit at Midway Airport. Arrangements were made for free parking for all visitors to the

exhibit, and staff members were there constantly between noon and 9:00 P.M. to answer questions. Later, the exhibit was placed on display at a local shopping center and it has been viewed by more than 300,000 persons.

On July 9, another evening meeting was held in the Midway Airport-Stevenson Expressway area for property owners and tenants who would be affected by the alignment. This meeting was also heavily attended, with some 400 persons present. The purpose was to explain relocation provisions and policies and to assure tenants and property owners that no precipitous action would be taken, and that fair and equitable procedures would be followed. The city's efforts to achieve meaningful relocation benefits in the ultimately adopted Federal Aid Highway Act of 1968 were described.

Persons attending all meetings were encouraged to submit written questions and were promised personal letters in reply. More than 260 such letters have been received and answered for persons living and working in the vicinity of the expressway.

Finally, three weeks after the first announcement, a public hearing was held by the Illinois Division of Highways and the Chicago Planning Commission at which the Midway-Stevenson proposal was again explained and all persons attending were given an opportunity to be heard. Approximately 100 persons from the Midway-Stevenson area attended.

By the time of the public hearings it was clear that the overwhelming weight of public opinion was in favor of the innovative Midway-Stevenson Design. This was evident in the uniformly favorable comments of professional groups, civic organizations, and community and metropolitan news media. Equally telling, in my judgment, was the character of the questions and criticisms voiced by local residents. Their responses did not challenge the basic design, which they endorsed. Their comments were directed at particular parts of the overall plan — a particular access or intersection — or they were concerned with specific questions of dislocation and relocation.

The success of our organized effort was mirrored by the press coverage following the four hour official public hearing. Of the four major metropolitan newspapers, one allotted four column-inches, one allotted one column-inch and the other two papers did not report the meeting at all. No controversy, no coverage!

We in Chicago are confident that we have both the political leadership and the professional talent among our cooperating public agencies and local professional consultants, to develop and achieve a new urban expressway with related community developments that will materially improve the quality of living for the surrounding urban environment. And, at the same time as we achieve our own urban goals, we expect to set design standards and develop design methods that will be of benefit to other urban communities.

Panel Discussion

MR. BURMEISTER: Highway designers, for some time, particularly with respect to freeways, have been urged to get some uniformity in the design of interchanges, off-ramps, highway movements in general; yet I understand that on this particular piece of highway, you are now proposing to completely reverse the traffic movement in order to get interior exit.

Was the cost of the alternate routes considered? I noticed Mr. Klein pays particular attention to that matter in the Baltimore situation.

MR. PIKARSKY: We are going through evolutionary changes and it was our position that we wanted to bring to bear all of the social influences so we did not constrict either design, engineering, or architecture to existing standards.

While AASHO has come up with standards over the years that created the finest highway system in the world, we are not willing to accept current standards as the ultimate. We have said that wherever an individual designer comes up with a departure he must justify that departure. We then have a review board which includes the highway agencies.

Money is one of the key issues here. This approach costs more money than the conventional highway if you consider only the highway itself. We have to change the attitude of all of us that are in the highway field to be social advocates. Where we design a highway only on the basis of the cost/benefit ratio and the funds are coming from only highway user sources, we may create a situation in the environment around that highway that will cost much more to correct. We felt that the conclusion we reached was the best public solution with a minimal increase in highway costs. It is about an 8 percent increase in cost, of a total of \$145 million for this one section; 8 percent is somewhere in the neighborhood of \$12 million.

MAYOR BRILEY: Mr. Pikarsky has some comments on who represents the neighborhoods that I wish he would share with us.

MR. PIKARSKY: As someone who is in the political family, I find it rather interesting when someone says we should have community participation. The question is, who represents the community? The militant who tries to organize a block club? The person who quietly tries to persuade the community that school systems are fine and that we should continue?

Basically the decision-makers are the elected representatives, and I think if you leave this room thinking anything else you are making a very great error. What we have done that has proved successful in some of our projects in Chicago is that we have gone to whoever claims to be a community group and we have said in essence: If you oppose

the project you are not helping. If you have any meaningful suggestions we will respond to those. Give us your suggestions, your contributions. We will then take all of those that we receive and the political entity that represents a combined effort of the various professionals in municipal government, in urban renewal and planning, and so forth, will come up with a series of recommendations. The mayor and the city council are the decision-makers and they will respond to their individual public who elects them. To assume anything else again is sheer folly. Who are the community leaders today? Who will they be tomorrow? A project may take a year or two years. You may find that you have received community support from local groups, block clubs, and others only to find when the project is under construction that there are different presidents, different leaders, different advocacies. The only people you can depend on to represent the community are their elected representatives.